

**AMENDMENTS TO THE SPECIFICATION:**

**Please insert the following header and paragraph on page 1 after the title:**

**RELATED APPLICATIONS**

The present application is based on International Application No. PCT/IL2004/000730 filed August 5, 2004 , and claims priority from, US Provisional Application Number 60/492,742, filed August 6, 2003, the disclosure of which is hereby incorporated by reference herein in its entirety.

**Please replace the paragraphs on page 9, lines 28 to page 10, line 8:**

Fig. 9 depicts the results of using a symmetric second order signal, wherein four servo mark sequences are recorded in two pairs of opposite track offsets +X, +Y, -X and -Y (|Y|>|X|), respectively. Thus, the servo offsets include servo offsets of two different magnitudes and any variations in the fixed offset between the read and write spots is corrected by a track error signal of the form:

$$\frac{A \cdot (B \cdot S1 - S2) + C \cdot (D \cdot S3 + S4)}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S3 + H \cdot S4))}$$

$$\frac{A \cdot (B \cdot S1 - S2) + C \cdot (D \cdot S3 - S4)}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S1 + H \cdot S2))}$$

where:

S1, S2, S3 and S4 are the respective signal amplitudes of the four offset mark sequences;

A, B, C and D are symmetry breaking factors; and

$\frac{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S3 + H \cdot S4))}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S1 + H \cdot S2))}$  is a general normalization factor.

**Please replace the paragraphs on page 23, lines 29 to page 24, line 8:**

Fig. 9 is a graphical representation showing a tracking error signal as a function of deviation from a nominal track center, characteristic of different formatting and tracking systems. The first S-curve 901 (dashed blue line) is calculated for a pair of sampled servo mark sequences that are evenly offset to the nominal track. The S-curve represents the symmetric difference S1 - S2. The second S-curve is calculated using a second order formula of the form:

$$\frac{A \cdot (B \cdot S1 - S2) + C \cdot (D \cdot S3 + S4)}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S3 + H \cdot S4))}$$

$$\frac{A \cdot (B \cdot S1 - S2) + C \cdot (D \cdot S3 - S4)}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S1 + H \cdot S2))}$$

where:

S1, S2, S3 and S4 are the respective signal amplitudes of the four offset mark sequences;

A, B, C and D are symmetry breaking factors; and

$\frac{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S3 + H \cdot S4))}{I \cdot (E \cdot (S1 + F \cdot S2) + G \cdot (S1 + H \cdot S2))}$  is a general normalization factor.

**Please replace the paragraphs on page 25, lines 6 to 9:**

Fig. 12 illustrates pictorially the use of oriented marks for the navigation of the spot in the radial direction. A specific embodiment of a manipulation that creates a tilted mark is the addition of a liquid crystal panel that blocks approximately two thirds of one half of the clear aperture of the optical unit.